Syllabi (Revised)
Four Year Under Graduate Programme (FYUGP)
Goalpara College (Autonomous)

DEPARTMENT OF ECONOMICS
Effective from Academic Year 2026-27

Existing Base Syllabus:
FYUGP Present Syllabus of Gauhati University

Prepared By
The Board of Studies Meeting
Held on 13/06/2026

DEPARTMENT OF ECONOMICS,
COURSE STRUCTURE
List of Major and Minor courses offered by the department of Economics for the first three years of FYUGP Program.
With effect from 2026 Batch

Semester	Major(Credit)	Minor(Credit)	SEC(Credit)
First	1: Introductory Economics (4)	1: Introductory Economics (4)	1: Data Analysis (3)
Second	2: Basic Elements of Economics(4)	2: Basic Elements of Economics (4)	2: Yet to published
Third	3: Intermediate Economics (4)	3: Indian Economy (4)	3: Yet to published
	4: Indian Economy (4)		
Fourth	5: Advanced Microeconomics (4)	4: Public Finance (4)	
	6: Advanced Macroeconomics (4)		
	7: Public Finance (4)		
	8: Quantitative Techniques for Economics (4)		
Fifth	9: Development Economics (4)	5: Development Economics (4)	
	10: International Economics (4)		
	11: Statistics for Economics (4)		
Sixth	12: Assam Economy (4)	6: Assam Economy (4)	
	13: Basics of Econometrics (4)		
	14: Fundamentals of Financial Economics (4)		
	15: Environmental Economics (4)		
7th	Yet to published		
8th	Yet to published		

SEMESTER I

Paper Title	Paper Code	Credit	Course Level	Marks (100)	Class
Introductory Economics	**ECO-01-CC-111**	**4**	**100–199**	**End semester = 60 Internal = 40**	**60**

Course Objective: This course introduces students to foundational concepts in microeconomics, macroeconomics, growth and development, emphasizing economic thinking. It demonstrates how these concepts apply to real-life situations.

Learning outcome: Upon completion of the course, students will be able to explain basic economic principles, analyze market structures and national income concepts, and assess key development indicators. It enables them to evaluate economic policies through logical reasoning.

Unit	Unit content	No of classes	Marks
I	**Introduction:** Introduction to Economic Problem: Scarcity, Choice and Opportunity cost; Production Possibility Frontier and Economic Efficiency; Demand: Meaning, Determinants and Demand Function; Individual and Market Demand; Law of Demand and Exceptions; Elasticity of Demand: Price, Income and Cross elasticity; Consumer Surplus; Supply and Supply Curve; Determinants of Supply and Law of Supply; Interaction of Demand and Supply – Derivation of Market Equilibrium	13	25
II	**Market and Market Structures** Market and its various forms: Perfect Competition; Monopolistic Competition, Monopoly Market; Price Discrimination; Oligopoly Market (idea only)	10	15
III	**National Income: Concepts and Measurements** Basic Concept of National Income; Circular Flow of Income; Concepts of GDP, GNP, NDP, NNP, Private Income, Personal Disposable Income, Per Capita Income, Real versus Nominal GDP; Methods of Measuring National Income and Accounting; Green Accounting	13	20
IV	**Economics of Growth and Development :** Growth and Development: Concepts and Distinctions; Indicators of Economic Development; Measures of Economic Development: GNI, PCI, PPP, HDI, PQLI: Concept of Sustainable Development; Idea of Inclusive Growth; An Overview of India's Growth and Development	12	20
V	**Contemporary Economic Issues in India** Poverty and Inequality; Unemployment; Inflation; Fiscal Federalism; Digital Economy; Sustainable Development in India	12	20

Recommended Books:

1. H.L. Ahuja: Advanced Economic Theory. (S. Chand)
2. A. Koutsayiannnis : Modern Microeconomics. (McMillan)
3. Rana & Verma : Macro Economic Analysis

4. Debraj Ray : Development Economics
5. R. K. Choudhary : Public Finance and Fiscal Policy.
6. Indian Economy, Uma Kapila

SEMESTER-II

Paper Title	Paper Code	Credit	Course Level	Marks (100)	Class
Basic Elements of of Economics	**ECO-01-CC-121**	**4**	**100–199**	**End semester = 60 Internal = 40**	**60**

Course Objective:

The course aims to provide students with a foundational understanding of money, banking, public finance, international trade, macroeconomic theories, and basic statistical methods. The course aims to develop analytical skills for understanding economic institutions, government policies, and quantitative techniques used in economic analysis.

Learning outcome:

- Upon completing this course, students will be able to:
- Apply relevant statistical tools to systematically analyze economic phenomena.
- Explain the role of money, banks, and the financial system.
- Understand basic concepts and policies of international trade.
- Describe the functions of public finance and fiscal policy.
- Compare Classical and Keynesian economic ideas.

Unit	Unit content	No of classes	Marks
I	**Money, Banking and Financial System:** Money: Definition, Features and Functions; Functions of Commercial Banks; Credit Creation; Role and Functions of Central Bank; Financial System: Definition, Components and Functions; Types of Financial System: Formal and Informal; Overview of the Indian Financial System	12	20
II	**Introduction to International Trade:** Importance of International Trade; Difference between Internal and International Trade; Classical Theories of International Trade: Theories of Absolute and Comparative Advantages; Trade Policies: Export Promotion and Import Substitution; Tariffs and Quotas .	12	20
III	**Introduction to Public Finance** Public Vs Private Finance; Market Failure and Role of Government; Provisioning of Public Goods; Government Budgets; Fiscal Policy: Objectives and Instruments .	10	15
IV	**Introduction to Classical and Keynesian Ideas** Classical Theory of Full-employment; Say's Law; Keynesian Theory of Effective Demand; Keynes' Theory of Under-employment Equilibrium	14	25
V	**Elementary Statistics** Methods of Statistical Enquiry: Parameters and Statistic; Data and	12	20

	Data Types; Methods of Collecting Data; Population and Sample; Sampling and Non-sampling Errors; Probability and Non Probability Sampling Presenting Data: Tables and Graphs; Summarising Data: Measures of Central Tendency and Dispersion		

Recommended Books:

1. S.P. Gupta : Statistical Methods, S Chand & Sons
2. Padmalochan Hazarika : Statistical Methods for Economics, Ashok book Stall
3. V. Pathak: Indian Financial System, Pearson Education, Singapore.
4. Rana and Verma : International Trade, Kalyani Publishers
5. A.N. Agarwal : Indian Economy-Problems of Development and Planning, International Publishers

SEMESTER-III

Paper Title	Paper Code	Credit	Course Level	Marks (100)	Class
Indian Economy	**ECO-01-CC-211**	**4**	**200–299**	**End semester = 60** **Internal = 40**	**60**

Course Objective:

The course aims to familiarize students with key economic concepts such as GDP, inflation, and economic growth, and to develop their ability to analyze and evaluate economic and development policies implemented by the government. It also seeks to provide an understanding of the agricultural, industrial, and service sectors of the Indian economy, enabling students to assess their performance and critically examine contemporary economic issues and challenges.

Learning outcome:

- Understand the structural weaknesses of the Indian economy at the time of independence.
- Understand and critically evaluate various development measures.
- Asses the growth trends in GDP and per capita income during the period 1951 -1990.
- Analyse the background and causes of Economic reform initiated in 1991.
- Describe the different aspects of poverty in Indian Economy after Economic Reform.
- Relate and analyze current global and national economic events.

Units	Contents of units	Classes	Marks
Unit 1	**Structure of Indian Economy:** Indian Economy at the time of Independence; Key Features of Indian Economy; Mixed Economy and Economic Planning in India; Trends in Economic Growth and Sectoral Composition since Independence; Trends in Human Development in India	11	20
Unit-2	**Agriculture and the Rural Sector** Land Reforms and Green Revolution; Performance of Agriculture in India: Issues of Production and Productivity; Issues Relating to Prices, Marketing and Finance; Agrarian Crisis of 1990s; Challenges in the 21st Century: GM Crops, Climate Smart Agriculture; Strategies for Doubling Farmers' Income, Contemporary Challenges and Recent agricultural Reforms	15	25
Unit-3	**Industries, Infrastructure and Service Sectors** Industrial Development in India: Strategies and Performances; Industrial Policies in India; Roles of Public Sector and MSMEs; Infrastructure Development in India: Transport, Communication and Energy; Service Sector in India: Growth, Trends and Roles; Emerging Trends of Informalisation in Service Sector	10	15
Unit- 4	**Economic Reforms and External Sector:** Economic Reforms in India: Context and Components; Liberalisation, Privatisation and Globalisation; India's Foreign Trade after Reforms; WTO and India; Foreign Investments in India	12	20

Unit- 5	**Some Recent Initiatives:** Goods and Service Taxes (GST); Direct Benefit Transfer (DBT); *Jan Dhan Yojana* and Digital Financial Inclusion;Labour Reform and Labour Codes;Banking Sector Reforms; *Vikshit Bharat* NITI AYOG.	12	20

Books Recommended:

1. Arvind Pangariya (2010): *India the Emerging Giant*, OUP
2. Jagdish Bhagawati and Arvind Panagariya (2015)*Why Growth Matters*, OUP
3. Abhijit Banerjee, Raghuram Rajan, Gita Gopinath, Mihir S. Sharma (2019) *What the Economy Needs Now*, Juggernaut Books, New Delhi
4. Statistical Appendix of the Latest Economic Survey, Ministry of Finance, Government of India

SEMESTER-III

Paper Title	Paper Code	Credit	Course Level	Marks (100)	Class
Intermediate Economics	**ECO-01-CC-212**	**4**	**200–299**	**End semester = 60** **Internal = 40**	**60**

Course Objective:

This course aims to provide students with a foundational understanding of consumer behaviour, production and cost theories, firm equilibrium under different market structures, money supply and inflation, and the construction and use of index numbers. It seeks to develop analytical skills for understanding economic decision-making and interpreting economic indicators.

Learning Outcome:

After successful completion of the course, students will be able to:

- Explain consumer behaviour using utility analysis, indifference curves, and demand theory.
- Analyze production processes, cost structures, and factor combinations in firms.
- Evaluate firm equilibrium under perfect competition and monopoly market structures.
- Understand the concepts of money supply, inflation, and the role of monetary policy.
- Construct and interpret index numbers and assess their applications and limitations in economic analysis.

Unit No	Unit Content	Classes	Marks
Unit-1	**Theory of Consumer's Behaviour:** Utility analysis: Cardinal and Ordinal Approaches; Indifference Curves and Budget Constraint; Consumer Equilibrium; Effects of Income and Price Changes on Budget Constraint; Income, Price and Substitution Effects: Normal and Giffen goods Derivation of Demand Curves;	12	20
Unit-2	**Theory of Production and Cost:** Total, Average and Marginal Product of a Single Variable Factor; Law of Variable Proportion; Production Function;	14	20

	Isoquant; Homogeneity of Production Function and Returns to Scale; The Least Cost Factor Combination; Expansion Path;Cost Concepts and Short and Long-run Cost Curves		
Unit-3	**Firm's Revenue and Equilibrium:** Perfect Competition and Monopoly; Equilibrium of a Profit Maximizing Firm under Perfect Competition and Monopoly: Short-run as well as Long-run;Monopoly Inefficiency, Deadweight Loss and Regulatory policies (Price Capping and Taxation)	10	20
Unit-4	**Money Supply and Inflation** Money Supply and Its Components; Meaning of Inflation; Quantity Theory of Money; Types of Inflation: Demand-pull and Cost-push, Effects of Inflation on Production and Distribution; Role of Monetary Policy	12	20
Unit-5	**Index Numbers:** Definition and Characteristics; Importance of Use; Types of Index Numbers: Price, Quantity and Value; Construction of Index Numbers: Weighted and Un-weighted; Understanding Common Index Numbers: Consumer Price Index, Cost of Living Index, Index of Industrial Production, Index of Agricultural Production and Sensex; Limitations of Index Numbers	12	20

Readings:

1. N C Ray, *Microeconomic Theory*, MacMillan
2. Dominick Salvatore, *Microeconomic Theory*, Schaum's Outline Series, McGraw Hill
3. Soumyen Sikdar, *Principles of Macroeconomics*, Oxford
4. Dominick Salvatore, *International Economics*,

SEMESTER-IV

Paper Title	Paper Code	Credit	Course Level	Marks (100)	Class
Advanced Microeconomics	**ECO-01-CC-221**	**4**	**200–299**	**End semester = 60 Internal = 40**	**60**

Course Objective:

This course aims to provide an advanced understanding of consumer and producer behaviour, market structures, factor pricing, and welfare economics. It seeks to develop students' analytical abilities to examine decision-making under uncertainty, strategic interactions among firms, resource allocation, and economic welfare in market economies.

Learning Outcome:

After successful completion of the course, students will be able to:

- Analyze consumer choice under risk, uncertainty, and imperfect information.
- Explain production decisions and compare different production functions and productivity measures.
- Evaluate pricing, output decisions, and strategic behaviour under various market structures using game theory.
- Analyze wage determination, labour market equilibrium, and the role of trade unions in factor markets.
- Apply general equilibrium and welfare economics concepts to assess economic efficiency and social welfare.

Unit	Contents	Classes	Marks
Unit-1	**Consumer Theory and Information Economics:** A Review of Indifference Curve; Violation of Premises of Indifference Curve Approach, Revealed Preference Theory; Inter-temporal Choice, Choice under Risk-Expected Return;Variability and Expected Utility Hypothesis; Asymmetric Information: Adverse Selection and Moral Hazard	10	20
Unit-2	**Theory of Production** Short-Run and Long-Run Production Functions; Fixed and Variable Factors of Productions; Law of Variable Proportion; Forms of Production Function: Cobb-Douglas, CES and Fixed Coefficient Type; Ideas of Partial and Total Factor Productivity; Choice of Inputs: Isoquants, Isocost lines and Producer's Equilibrium.	10	15
Unit-3	**Market Structure and Game Theory**: Monopoly: Pricing with Market Power; Degree of Monopoly, Price Discrimination; Multi-plant Monopoly; Monopolistic Competition: Product Differentiation, Perceived and Proportionate Demand Curves; Price-Output Determination; Oligopoly and Game Theory: Features of Oligopoly, Introduction to Game Theory (Players, Strategies, Payoffs, Two Person Zero Sum Game, Non-zero Sum Games)	13	20
Unit-4	**Factor Pricing:**	15	25

	Marginal Productivity Theory; Demand and Supply of Labour: Shifts in Demand Curve, Backward Bending Supply Curve of Labour; Market Equilibrium: Wage and Employment Determination in Competitive Labour Markets; Collective Bargaining and Trade Unions.		
Unit-5	**General Equilibrium & Welfare Economics:** Partial versus General Equilibrium Approaches; Walrasian General Equilibrium System; Pareto Optimality; Kaldor-Hicks Compensation Criteria; Social Welfare Function; Fundamental Theorems of Welfare Economics; Arrow's Impossibility Theorem	12	20

Recommended Readings:

1. Dominick Salvatore,Schaum's Outline of Microeconomics, McGraw-Hill Education
2. G.S. Maddala and Ellen Miller, Micro Economic Theory and Application, Tata McGraw Hill.
3. Koutsoyiannis. A, Modern Micro-Economics, ELBS/Macmillan.
4. Pindyck, R. &Rubinfield, D.L., " Microeconomics", Pearson
5. C. Snyder and W. Nicholson, Fundamentals of Microeconomics, Cengage Learning (India).
6. Anindya Sen, Microeconomics-Theory and Application, Oxford University Press

SEMESTER-IV

Paper Title	Paper Code	Credit	Course Level	Marks (100)	Class
Advanced Macroeconomics	**ECO-01-CC-222**	**4**	**200–299**	**End semester = 60 Internal = 40**	**60**

Course Objective:

This course aims to provide students with a comprehensive understanding of advanced macroeconomic theories related to consumption, investment, income determination, inflation, unemployment, and economic growth. It seeks to develop analytical skills for examining macroeconomic models and evaluating economic policies and growth processes.

Learning Outcomes:

After successful completion of the course, students will be able to:

- Explain the major theories of consumption and investment and their implications for aggregate demand.
- Analyze the determination of income, output, and interest rates using the IS-LM framework.
- Evaluate the relationship between inflation and unemployment using the Phillips Curve and expectations theories.
- Understand the causes and characteristics of business cycles and unemployment.
- Compare and critically assess major theories of economic growth, including Harrod-Domar, Solow, and endogenous growth models

Unit No	Contents	classes	Marks
Unit-1	**Consumption Function:** Meaning; Average and Marginal Propensity to Consume; Factors Influencing Consumption Spending; Keynesian Consumption Function: Psychological Law of Consumption, Consumption Puzzle (Kuznets); An Overview of Post Keynesian Theories of Consumption: Absolute Income, Relative Income, Permanent Income & Life Cycle Hypothesis	15	20
Unit-2	**Investment Function:** Types of Investment: Autonomous and Induced; Determinants of Business Fixed Investment; Marginal Efficiency of Capital, Marginal Efficiency of Investment; Keynesian concept of multiplier, Accelerator Theory of Investment; Multiplier-Accelerator Interaction.	15	20
Unit-3	**Macroeconomic modelling**: Concept of IS and LM curve, Derivation of IS-LM curve, IS-LM Equilibrium and Policy Analysis	14	25
Unit-4	**Inflation, Unemployment and Business Cycle** Inflation-Unemployment Trade off and Phillips Curve; Adaptive and Rational Expectations; policy ineffectiveness debate. Natural rate of unemployment/NAIRU Business cycle (concept only)	08	15
Unit-5	**Growth Models:** Harrod-Domar Model**;** Solow Model**;** New Endogenous Growth Theory; Kaldor's technical progress function	08	15

References:

1. Debraj Ray, Development Economics, Oxford University Press, 2009
2. Dornbusch, Fischer and Startz, Macroeconomics, McGraw Hill, 11th edition, 2010
3. Dominick Salvatore, International Economics: Trade and Finance, John Wiley, 10th Edition 2011
4. N. Gregory Mankiw. Macroeconomics, Worth Publishers, 7th edition, 2010
5. Richard T. Froyen, Macroeconomics, Pearson Education Asia, 2nd edition, 2005
6. Thirlwall, A. P. "Growth and Development" Palgrave, 9th edition, 2011.

SEMESTER-IV

Paper Title	Paper Code	Credit	Course Level	Marks (100)	Class
Public Finance	**ECO-01-CC-223**	**4**	**200–299**	**End semester = 60** **Internal = 40**	**60**

Course Description:
This course aims to provide students with a comprehensive understanding of public finance, including government intervention, taxation, public expenditure, public debt and budgeting. It also examines the objective of fiscal policy and explores Fiscal Federalism in India.

Learning Outcomes:
After successful completion of the course, students will be able to:

- Explain the scope, objectives, and principles of public finance and fiscal intervention.
- Analyze market failures and evaluate the role of government in correcting them.
- Assess the principles, incidence, and economic effects of taxation.
- Evaluate public expenditure programmes, subsidies, and investment decisions using economic criteria.
- Understand the sources, management, and implications of public debt and government budgeting.
- Analyze fiscal policy measures and the functioning of fiscal federalism in India.

Unit	Content	Classes	Marks
Unit-1	**Meaning, Scope and Nature :** Public Finance and its nature. Objectives of Fiscal Intervention: Allocation, Distribution and Stabilization. Parameters for policy evaluation: *Equity, Efficiency, Paternalism and individual freedom and their trade off.*	10	15
Unit-2	**Market Failure and Public Intervention:** Meaning and nature of Public Goods and the Free Rider Problem. Externalities: inefficiencies and corrections, property rights, Coase theorem.	10	15
Unit-3	**Taxation :** Meaning and objectives of taxation ; Principles of taxation: Benefit vs Ability. Shifting and Incidence of tax. Economic effects, dead weight loss and distortion.	10	20
Unit-4	**Public Expenditure :** Principles of Expenditure Analysis, Fixed Quantity Subsidy for Marketed goods: overconsumption and under consumption. Excise Subsidy: Allocative and Distributive Effect. Public Investment and Social Cost-Benefit Analysis.	10	20
Unit-5	**Public Debt and Budgeting:** Sources of Public Debt and its redemption. Burden of Public Debt. Strategies of Debt Management. Budgeting: Structure of public budget and it's rationale; Incremental vs Zero-based budgeting. Outcome Budget. Gender budgeting and Divyang Budget (concept only)	10	15
Unit-6	**Fiscal Policy and Federal Finance:**	10	15

	Objectives and Strategies, Compensatory fiscal policy, pump priming and its effects, functional finance approach. Balanced Budget Multiplier. Fiscal Federalism: Vertical and Horizontal Equity, Inter-governmental Transfers. Finance Commission of India: An introduction		

Reference Books and Materials:

1. Browning E K & Browning J M, Public Finance and the Price System, Pearson Education. Singapore. 2. Hyman D N, Public Finance: A Contemporary application of Theory to Policy, Thomson South Western.

3. Ulbrich H, Public Finance in Theory and Practice, Thompson South Western.

4.Mukherjee S, Ghose A & Nag N N, Analytical Public Finance. Public Economics Public Choice-Public Policies, New Central Book Agency (P), Kolkata.

5. Musgrave & Musgrave., Public Finance in Theory and Practice, McGraw Hill, Singapore.

SEMESTER-IV

Paper Title	Paper Code	Credit	Course Level	Marks (100)	Class
Quantitative Techniques for Economics	**ECO-01-CC-224**	**4**	**200–299**	**End semester = 60 Internal = 40**	**60**

Course Outcomes

Upon successful completion of this course, students will acquire a fundamental understanding of mathematical concepts and quantitative techniques used in economics. They will be able to apply concepts of sets, functions, matrices, calculus, optimization, and integration to analyze economic problems, solve mathematical models, and interpret economic relationships. The course will develop students' analytical and problem-solving skills, enabling them to use mathematical tools effectively in the study of economic theories.

Learning Outcomes

After completing this course, students will be able to:

1. Understand basic mathematical concepts such as number systems, sets, relations, and functions.
2. Apply matrix operations and solve simultaneous equations.
3. Use differentiation techniques for economic analysis.
4. Solve optimization problems involving cost, revenue, and profit functions.
5. Apply integration to derive total economic functions from marginal functions.
6. Analyze and interpret economic problems using quantitative methods.

Unit	Content	Classes	Marks
Unit-1	**Basics of Mathematics:** Constants and Variables, Number System, Sets and Set Operations, Ordered Pairs and Cartesian Products, Relations and Functions, Types of Functions: Quadratic, Polynomial, Power, Exponential, Logarithmic; Limit and Continuity of a Function	10	15
Unit-2	**Matrix Algebra:** Matrix: various types of matrices, vector and vector space-	14	25

	concept, matrix operations: addition, subtraction and multiplication; rank, norm and trace of a matrix, introduction to the concept of determinants and their properties, non-singularity of matrix, solutions of simultaneous equations by using Cramer's rule,		
Unit-3	**Differential Calculus:** Differentiation of a function, Basic rules of differentiation, partial and total differentiation, second and higher order derivatives for single variable	14	25
Unit-4	**Optimization Techniques** Unconstrained maxima and minima with single explanatory variable-application to cost minimization, revenue maximization, tax revenue maximization, profit maximization and equilibrium of firm.	14	25
Unit-5	**Integration:** Meaning and significance of integration, basic rules of integration, significance of a constant after integration, applications: derivations of total functions (total cost, total revenue, consumption and saving functions) from marginal functions,	8	10

Reference Books and Materials:

1. K. Sydsaeter and P. Hammond, *Mathematics for Economic Analysis*, Pearson Educational Asia: Delhi, 2002

2. Chiang A.C. and K. Wainwright, *Fundamental Methods of Mathematical Economics*, McGraw Hill International Edition

3. Baruah S.N., *Basic Mathematics and its Economic Applications*, MacMillan 4. Jay L. Devore, Probability *and Statistics for Engineers*, Cengage Learning, 2010.

5. John E. Freund, *Mathematical Statistics*, Prentice Hall, 1992.

SEMESTER-V

Paper Title	Paper Code	Credit	Course Level	Marks (100)	Class
Development Economics	**ECO-01-CC-312**	**4**	**300–399**	**End semester = 60** **Internal = 40**	**60**

Course Objective:

Upon successful completion of this course, students will gain a comprehensive understanding of major theories, strategies, and issues of economic development. They will be able to critically analyze classical and modern development theories, evaluate alternative development strategies, understand the challenges of poverty, inequality, gender, and sustainability, and assess the role of development policies in promoting economic growth and social welfare. The course will enable students to examine contemporary development experiences with special reference to India and the global economy.

Learning Outcomes

After completing this course, students will be able to:

1. Explain major classical and modern theories of economic development.
2. Compare different development strategies and their policy implications.
3. Understand the significance of demographic dividend and capability approach.
4. Examine sustainable development goals and contemporary development challenges.

Unit	Content	Classes	Marks
Unit-1	**Theories of Development:** Classical Theory of Development : Adam Smith's Theory of Economic Growth, David Ricardo's Theory of Growth and Distribution, J.B. Say's Law of Market; Marxist Theory of CapitalistDevelopment.	15	25
Unit-2	**Strategies of Development:** Rostow's Stages of Growth; Big Push Theory; Balanced Vs Unbalanced Growth Strategies; Capital Vs Labour Intensive Strategies; Export-led Strategies of Development	15	25
Unit-3	**Dualistic Development Theory:** Lewis Theory of development, Ranis-Fei, Harris-Todaro, Myrdal Cumulative causation Theory, Dependency School of Development	12	20
Unit-4	**Issues of Development:** Poverty and Inequality: Conceptual Issues, Its Measurement ; Demographic Dividend; Gender and Development; Sen's Capability Approach.	10	15
Unit-5	**Development Policies and Contemporary Issues:** Role of Agriculture and Industry; Globalisation and Development; Sustainable Development Goals; Developmental Aid and Global Partnership; Development Experience of India.	8	15

Reference Books and Materials:

1. Bhattacharyya, R.N. (ed) (2004), Environmental Economics: An Indian Perspective, Oxford University Press, New Delhi.
2. Ray, Debraj (2012), Development Economics, Oxford University Press, New Delhi.
3. Thirwall, A.P. (2006), Growth and Development: With Special Reference to Developing Economies, Palgrave.
4. Todaro, M., Smith, S (2015), Economic Development, Pearson.

SEMESTER-V

Paper Title	Paper Code	Credit	Course Level	Marks (100)	Class
International Economics	**ECO-01-CC-313**	**4**	**300–399**	**End semester = 60** **Internal = 40**	**60**

Course Outcomes

Upon successful completion of this course, students will develop a sound understanding of the theories and principles of international trade and international monetary systems. They will be able to analyze the determinants and gains from trade, evaluate trade policies and exchange rate systems, understand regional economic integration, and assess the functioning and evolution of the international monetary system. The course will equip students with analytical skills to examine global economic issues and international economic relations.

Learning Outcomes

After completing this course, students will be able to:

1. Explain major theories of international trade and factor price equalization.
2. Analyze terms of trade, gains from trade, and balance of payments issues.
3. Evaluate the effects of tariffs, quotas, and alternative trade policies.
4. Distinguish between fixed, flexible, and managed floating exchange rate systems.
5. Understand the forms, benefits, and costs of international economic integration.

Unit	Content	Classes	Marks
Unit-1	**Evolution of International Trade Theories :** Absolute Advantage theory ;The Ricardian theory- comparative advantage, Heckscher-Ohlin model, Factor price equalisation- Absolute and Relative,	15	25
Unit-2	**Terms Of Trade And Gains From Trade** Terms of Trade (ToT): Concept and Factors affecting ToT; Gains from Trade; Offer Curves, Distribution of gains from trade in terms of Offer Curves,. BOP: Causes of Disequilibrium and Adjustment Mechanism.	13	20
Unit-3	**Trade Policy :** Free trade vs. Protection :Tariffs and Quota, partial equilibrium analysis; controversies in trade policy, fixed versus flexible exchange rates; system of managed floating exchange rate.	12	25
Unit-4	**International Economic Integration :** Importance and forms of economic integration; costs of economic integration; Theories of Customs Union- partial equilibrium analysis; Regional Trade Blocs : ASEAN,	10	15

	BRICS.		
Unit-5	**International Monetary System:** International monetary systems-definition, properties of a good international monetary system, Evolution of international monetary system from past to present.	10	15

Reference Books and Materials:

1. Paul Krugman, Maurice Obstfeld, and Marc Melitz, *International Economics: Theory and Policy*, Addison-Wesley (Pearson India Education Services), 10th edition, 2019.

2. Dominick Salvatore, *International Economics: Trade and Finance*, John Wiley International Student Edition, 10th edition, 2011.

3. Bo Sodersten and Geoffrey Reed: International Economics, Macmillan, 3rd edition, 1994.

4. H G mannur, *International Economics: Theory and Practice*, Vikash Publishing House

SEMESTER-V

Paper Title	Paper Code	Credit	Course Level	Marks (100)	Class
Statistics for Economics	**ECO-01-CC-314**	**4**	**300–399**	**End semester = 60 Internal = 40**	**60**

Course Outcomes

Upon successful completion of this course, students will develop a fundamental understanding of statistical and quantitative methods used in economic analysis. They will be able to apply techniques of correlation, regression, probability, theoretical distributions, and time series analysis to interpret data, identify relationships among variables, and analyze economic trends for informed decision-making.

Learning Outcomes

After completing this course, students will be able to:

1. Measure and interpret relationships among variables using correlation and regression techniques.
2. Apply probability concepts and expected values to analyze uncertain economic events.
3. Understand and use common probability distributions such as Binomial, Poisson, and Normal distributions.
4. Analyze and interpret time series data by identifying trends and patterns.

Unit	Content	Classes	Marks
Unit-1	**Correlation Analysis:** Correlation; Coefficient of Linear Correlation; Properties of Correlation Coefficient; Rank Correlation; Partial Correlation; Multiple Correlation	12	20
Unit-2	**Regression Analysis:** Concept; Difference with Correlation Analysis;Estimation of Regression Line in a Bivariate Distribution: Method of Least Square; properties of regression coefficients; Coefficient of Determination	12	20

Unit-3	**Elementary Probability Theory:** Sample spaces and events; probability axioms and properties; addition and multiplication theorem of probability, counting techniques; conditional probability and Bayes' rule (concept only); Defining random variables; expected values of random variables	12	20
Unit-4	**Theoretical Distributions:** Functions of random variables (probability mass function and probability density function), Commonly used discrete and continuous distributions (Uniform, Binomial, Poisson and Normal).	12	20
Unit-5	**Introduction to Time Series:** Time Series Analysis-Concept and Components; Measurement of Trend Moving average and Least square method, Fitting of linear trend curves.	12	20

Reference Books and Materials:

1. Gupta, S.P. *Statistical Methods,* Sultan Chand & Sons,
2. Gupta, S.C and Kapoor, V.K., *Fundamentals of Applied Statistics*, Sultan Chand & Sons,
3. Gupta, S.C and Kapoor, V.K., *Fundamentals of Mathematical Statistics*, Sultan Chand & Sons,
4. Nagar, A.L and Das, R.K, *Basic Statistics*, OUP,
5. Yamane, Taro, *Statistics: An Introductory Analysis*, Harper and Row
6. Salvatore, D. *Mathematics and Statistics, Schaum's Series*, Tata McGraw Hill

SEMESTER-VI

Paper Title	Paper Code	Credit	Course Level	Marks (100)	Class
Assam Economy	**ECO-01-CC-321**	**4**	**300–399**	**End semester = 60 Internal = 40**	**60**

Course Outcomes

Upon successful completion of this course, students will gain a comprehensive understanding of the historical evolution, structure, and development of the economy of Assam. They will be able to analyze the impact of colonial policies, demographic and sectoral changes, infrastructure and agricultural development, state finances, and Assam's economic relationship with neighboring regions.

Learning Outcomes

After completing this course, students will be able to:

1. Explain the impact of colonial policies and historical events on the economy of Assam.
2. Analyze demographic trends, workforce characteristics, and sectoral growth patterns in the state.
3. Evaluate the status, prospects, and challenges of agriculture, industry, infrastructure, and tourism in Assam.
4. Assess the structure and sustainability of state finances and fiscal decentralization.
5. Examine Assam's economic linkages with neighboring states and its role in India's Act East Policy.

Unit	Content	Classes	Marks
Unit-1	**The Economy under Colonial Rule (1837 -1947):** Imposition of Land Revenue and Its Impact, Prohibition of Opium Production and State Takeover of Opium Trade, Inflow of Colonial Investment in Plantation, Mining and Other Industries. Development of Water Transport and Railways, In-migration of Population and its Impact on the Economy: Shock of Partition and its Impact	10	15
Unit-2	**Growth and Sectoral Composition in the Post-Independence Period:** Population growth trends before and after 1971, Trends in Demographic Parameters: Population Density, Sex Ratio, Life Expectancy, Fertility Rate and Infant Mortality Rate – Work Force and Labour Force Participation, Occupational Distribution. Trends and Sector-wise Composition of GSDP, Trend in Per Capita NSDP in comparison with trends in all-India Per Capita.	15	25
Unit-3	**Sectoral Status and Prospects**: **Infrastructure:** Status of Road, Rail and Air Connectivity within and out of the State; Potentials and Limitation of Waterways Development; Status of Power and Telecommunication **Agriculture:** Land Holding Patterns, Land Tenure and Land Reforms, Cropping Pattern, Production and Productivity of Principal Crop –Diversification of the Rural Economy to Horticulture, Fishery, Livestock and Non-farm activities – Prospects and Challenges of the Sector. **Industry:** Tea Industry , The Future of Hydrocarbon Industry. Traditional Handloom	20	35

	Handicraft and their Prospect; **Service Sector**: Size and Composition. Tourism Resources and their Economic Potentials: Policies for sustainable realization		
Unit-4	**State Finances**: Trends and composition of State Government receipts before and after GST regime. Composition of Public Expenditure and its implications. Sustainability of Government Borrowing. Fiscal Devolution to Local Bodies (Panchayats, Municipalities and Autonomous Councils)	9	15
Unit-5	**Assam Economy in its Neighborhood:** Mutual inter-dependence with neighboring States Stakes of Assam in the Act East Policy	6	10

Reference Books and Materials:

1. Atul Goswami "Assam's Industrial Development: Urgency of New Direction", Economic and Political Weekly 1981
2. Department of Economics, Gauhati University, "Identity Aspirations, Developmental Backlogs and Governance Issues in Northeast India" Maliyata Offset Press, Mirza, 2016
3. Directorate of Economics and Statistics, Government of Assam, "Economic Survey Assam" [recent issues] https://des.assam.gov.in/information-services/economic-survey-assam
4. Directorate of Economics and Statistics, Government of Assam, "Statistical Handbook of Assam" 2018 or later addition
5. Guha, Amalendu, Planter's Raj to Swaraj, Second Edition (paperback)
6. India Brand Equity Foundation "About Assam: Tourism, Industries In Assam,
7. Agriculture, Economy & Geography", June 2020, https://www.ibef.org/states/assam.aspx
8. J B Ganguli, "Economic Conditions and Change in North-East India" in A.P. Singha (ed) Changing North East India, Ludhiana: Gagan Publishers, 1986
9. J N Sarma, "Problems of Economic Development in Assam" Economic and Political Weekly, Vol. 1, No. 7, Pp. 281+283-286.
10. Planning and Development Department, Government of Assam "Assam Human Development Report 2014"

SEMESTER-VI

Paper Title	Paper Code	Credit	Course Level	Marks (100)	Class
Basics of Econometrics	**ECO-01-CC-322**	**4**	**300–399**	**End semester = 60** **Internal = 40**	**60**

Course Outcomes

Upon successful completion of this course, students will develop a fundamental understanding of econometric methods and their application in economic analysis. The course will cover basic concepts such as linear regression, estimation techniques, and other topics related to the analysis of economic data. They will be able to estimate and interpret regression models, conduct statistical inference and hypothesis testing and identify common specification and estimation problems.

Learning Outcomes

After completing this course, students will be able to:

1. Apply statistical inference and hypothesis testing techniques in economic data analysis.
2. Estimate and interpret simple and multiple linear regression models using OLS methods.
3. Evaluate the goodness of fit and test hypotheses related to regression parameters.
4. Identify and understand problems such as multicollinearity, heteroscedasticity, autocorrelation, and specification errors.
5. Use econometric tools to analyze economic relationships and support evidence-based decision-making.

Unit	Content	Classes	Marks
Unit-1	**Statistical Background:** Revision of Probability Distribution: Normal, chi-square, t andF Distributions; Estimation of Parameters; Properties of Estimators; Statistical Inferences and Hypothesis testing; Type I and Type II Errors; Power of a Test; Confidence Interval and Level of Confidence; Econometric Models; Methods of Econometric Analysis	10	15
Unit-2	**Simple Linear Regression Model:** Two Variable Linear Regression Model; Estimation of Model by the Method of Ordinary Least Squares (OLS);Assumptions of OLS; Properties of Estimators: Gauss-Markov Theorem, BLUE; Goodness of Fit; Tests of Hypotheses andConfidence Intervals;	12	25
Unit-3	**Multiple Linear Regression Model:** Estimation of Parameters; Properties of OLS Estimators; Goodness of Fit; R2 and Adjusted R2, Partial Regression Coefficients, Testing Hypotheses: Individual and Joint, Qualitative (dummy) Independent Variables	10	15
Unit-4	**Violation of Assumptions:** Multicollinearity; Heteroscedasticity; Autocorrelation; Specification Errors; Diagnostic Testing and Treatments (concepts only)	10	15
Unit-5	**Specification Problems:** Omission of a relevant variable, inclusion of irrelevant variable, tests of specification errors	10	10

Reference Books and Materials:

1. R P Hooda, Statistics for Business and Economics, Vikas Publishing
2. D. N. Gujarati and D.C. Porter, Basics of Econometrics, McGraw Hill, 5th edition, International Edition, 2009.
3. D. N. Gujarati and D.C. Porter, Essentials of Econometrics, McGraw Hill, 4th edition, International Edition, 2009.
4. Christopher Dougherty, Introduction to Econometrics, Oxford University Press,4th edition, Indian edition, 2011.

5. Wooldridge J.M., Introductory Econometrics: A Modern Approach, Cengage Learning India Pvt. Ltd, 2014.
6. Madnani, G. M. K., *Introduction to Econometrics: Principles and Applications*, CBS Publishers & Distributors, 8th Edition, 2015.
7. Nachane, D. M., *Econometrics: Theoretical Foundations and Empirical Perspectives*, Oxford University Press, 2006.

SEMESTER-VI

Paper Title	Paper Code	Credit	Course Level	Marks (100)	Class
Fundamentals of Financial Analysis	**ECO-01-CC-323**	**4**	**300–399**	**End semester = 60 Internal = 40**	**60**

Course Outcomes

Upon successful completion of this course, students will acquire a comprehensive understanding of financial markets, financial instruments, and investment valuation techniques. They will be able to analyze the functioning of money and capital markets, apply time value of money concepts, value financial assets, and understand the role of derivative instruments in risk management and investment decision-making.

Learning Outcomes

After completing this course, students will be able to:

1. Explain the structure, functions, and instruments of money and capital markets.
2. Apply time value of money concepts to evaluate investment decisions and cash flows.
3. Analyze and value financial assets such as bonds and stocks using appropriate valuation models.
4. Understand the functioning of primary and secondary capital markets, including mutual funds and stock market indices.
5. Evaluate the role of derivative instruments and trading strategies in managing financial risk and investment opportunities.

Unit	Content	Classes	Marks
Unit-1	**Money Market:** Money Market: Structure and functions, Instruments in the money market. Liquidity Management in the Money Market	10	15
Unit-2	**Capital Market:** The Capital Market: Nature and functions, Primary Capital Market: Instruments of resource mobilization- *Public Issues: IPO & FPO, Right Issues, and Private Placement.* Pricing of new issues. Secondary Capital Market: Trading & Settlement. Stock Market Index. Mutual Fund and its functional classification.	15	25
Unit-3	**Intertemporal Value of Money:** Time value of money , future value : Single cash flow, multiple cash flow, annuity, present value : Single cash flow, multiple cash flows, annuity, Net present value, Rate of return, Internal rate of Return	12	20
Unit-4	**Valuation of Financial Assets:** The law of One Price and Arbitrage, The valuation of debt instruments: Pure Discount Bonds. Coupon Bonds, Current Yield	13	25

	and Yield to Maturity, Valuing stock: Value of a Common Stock and the Dividend Discount Model: Zero Growth and Constant Growth.		
Unit-5	**The Derivative Market:** Nature of the Derivative Market, Traders and Instruments in a derivative market, Trading Strategies: Hedging, Speculation for Arbitrage Strategies.	10	15

References

1. Alexander G J, Sharpe W F & Bailey J V. **Fundamentals of Investments** Pearson Education, Singapore
2. Bodie Z, Merton R. C. &Cleeton D. L. **Financial Economics**. Pearson/ Prentice Hall.
3. Madura J. **Financial Institutions and Markets**, Thomson South Western.
4. Pathak B. V. **Indian Financial System**, Pearson Education, Singapore.
5. Prasanna Chandra.**Fundamentals of Financial Management**. McGraw Hill Education
6. Rustagi, R.P. **Fundamentals of Financial Management**. Taxmann Publication Pvt. Ltd.

SEMESTER-VI

Paper Title	Paper Code	Credit	Course Level	Marks (100)	Class
Environmental Economics	**ECO-01-CC-324**	**4**	**300–399**	**End semester = 60 Internal = 40**	**60**

Course Outcomes

Upon successful completion of this course, students will develop an understanding of the relationship between the environment and the economy, the causes and consequences of environmental problems, and the role of economic policies in environmental management. They will be able to analyze market failures, evaluate environmental policy instruments, understand sustainable development approaches, and assess global environmental challenges and their economic implications.

Learning Outcomes

After completing this course, students will be able to:

1. Explain the interrelationship between environment, ecology, and economic activities.
2. Analyze market failures, externalities, and the management of environmental resources.
3. Understand the principles and approaches of sustainable development and green accounting.
4. Assess global environmental issues such as climate change, transboundary pollution, and the environment-development nexus.

Unit	Content	Classes	Marks
Unit-1	**Introduction:** Basic concepts: Environment, Ecology, Economy and the ecosystem. Environmental Economics: Definition , scope, Nature and Significance ; Inter-linkages between the environment and the economy.	10	20
Unit-2	**Market Failure in allocation of Environmental resources:** Market Failure: Meaning and Causes of market failure in an	10	20

	environmental context; Environment as a public good, Externality and its types; Solutions to market failure: Government Intervention; Common Property Resources and its management.		
Unit-3	**The Design and Implementation of Environmental Policy:** Environmental Policies: An Overview of regulatory frameworks ; Conventional Instruments: Command and Control (CAC) approach; Economic Instruments of Environmental Policies: Pigovian taxes and effluent fees, tradable permits and Liability rules. Monitoring and Enforcement: Meaning, Penalties, Cost of abatement.	15	20
Unit-4	**Sustainable Development:** Approaches to Sustainable Development: weak sustainability, strong sustainability, Safe minimum standard approach, ecological perspective and social perspective, Rules and indicators of Sustainable Development; Green Accounting (concept only)	10	20
Unit-5	**International Environmental Problems and Initiatives:** Transboundary pollution (Problems of International Externalities), Economics of Climate change and Variability: Causes and Consequence; Inter linkages and trade off between Environment and Development. Environmental Kuznet Curve. Trade and environment: pollution haven hypothesis. Global Intervention for Sustainable Development	15	20

Reference Books:

1. Charles Kolstad, Intermediate Environmental Economics, Oxford University Press,
2. Bhattacharyya R, Environmental Economics, Oxford University Press.
3. Nick Hanley, Jason F. Shogren and Ben White, Introduction to Environmental Economics, Mc Millan Press.
4. Robert N. Stavins (ed.), Economics of the Environment: Selected Readings, W.W. Norton, 5th edition, 2005.
5. Roger Perman, Yue Ma, James Mc Gilvray and Michael Common, Natural Resource and Environmental Economics, Pearson Education/Addison Wesley, 3rd edition, 2003.
6. Maureen L. Cropper and Wallace E. Oates, 1992, ―Environmental Economics: ASurvey, ‖ Journal of Economic Literature, Volume 30:675-740

Syllabus for FYUGP, Skill Courses (SEC): 2026-27,
Goalpara College (Autonomous)
PAPER NAME:- DATA ANALYSIS
Paper Code: ECO-01-SE-111
SEMESTER-I

Credit: 3 (Theory: 2 and Project work: 1) **Total Marks: 75**

Distribution of Marks:

1. **End Semester Examination: Total Marks: 30**
2. **Sessional Examination: Total Marks: 20**
3. **Project work : Total Marks: 25**

Course Description:
Statistical tools and techniques are one of the basic necessities for analytical research works. This course is designed to teach the students about different statistical tools used in analytical research studies and its importance in answering different real world economic problems. Students will learn how to deal with different statistical techniques and tools, which are appropriate in which situation, interpretation of the results extracted from those techniques, etc.

Unit	Content	Classes	Marks
Unit-1	Meaning and Significance of Research, Use and Importance of Data in Research, Types of Data and its Collection Methods , Questionnaire and Interview Schedule, Census versus sample survey.	10	10
Unit-2	Measures of Central Tendency and Dispersion (Mean: Arithmetic Mean, Geometric Mean and Harmonic Mean; Median; Mode; Range, Mean Deviation, Quartile Deviations and Standard Deviation.	15	20
Unit-3	Correlation : Pearson Correlation Co-efficient and Spearman's Rank Correlation Co-efficient. Regression Analysis; Ordinary Least Squares Method;	15	20
Unit-4	**Project work: Collection of data and its analysis.**	5	25

Reading List:

1. Dr.S.P. Gupta, Statistical Methods, Sultan Chand & Sons.
2. S.C. Gupta and V.K. Kapoor, Fundamentals of Mathematical Statistics, Sultan Chand & Sons.
3. Webtech Solutions Inc., Mastering Microsoft Excel Functions and Formulas.
4. P.H. Karmel and M. Polasek (1978), Applied Statistics for Economists, 4th edition, Pitman.
5. Damodar N. Gujarati and Sangeetha, Basic Econometrics, Tata Mc Grow-Hill Education Private Limited.